

ORIGINAL

**REMEDIAL ACTION WORKPLAN
and
RCRA CLOSURE PLAN**

**Former Bayonne Barrel and Drum Facility
150 Raymond Boulevard
Newark, Essex County, NJ**

May 30, 2001

**Prepared for:
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301311



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1.0 INTRODUCTION

On September 21, 2000, a meeting was held at USEPA's office in Edison to discuss the redevelopment of the former Bayonne Barrel and Drum Company (BB&D) site. Present at the meeting were representatives of USEPA, NJDEP, the City of Newark, and the developer. The proposed site redevelopment consisted of capping the entire site with asphalt and preparing the site for commercial use. Prior to redeveloping the site, the EPA is requiring the removal of PCB impacted soils in the southern portion of the Yard Area. Due to the elevated levels of PCB's detected, the PCB impacted soils were further investigated to determine their areal extent on the site.

This Remedial Action Workplan (RAW) is written to address the USEPA's request for removal of the PCB contaminated soil in the Yard Area, cleanup the site, and bring the site to a point where it can be redeveloped and once again provide tax revenue to the City of Newark. Cilli Environmental Group, LLC (CEG) proposes the following strategy: once the PCB contaminated soil has been remediated, CEG proposes capping the entire site with asphalt and preparing the site for a commercial/retail shopping center.

2.0 SITE DESCRIPTION

2.1 General

The Bayonne Barrel and Drum Company was founded in 1940 as the result of the merger of two companies; the Bayonne Barrel Company and the Export Barrel Company. During the late 1930's or early 1940's steel drums were at a premium due to the war effort and Bayonne Barrel and Drum began reconditioning steel drums. From the 1940's until the operation ceased in 1982, the reconditioning facility was developed as described in section 3.0 of this plan. In general, RCRA empty drums were received at the site for reconditioning either for specific customer re-use or for general re-sale. Although the mechanical means for handling and reconditioning drums changed over the life of this facility, the processes reportedly remained similar.

2.2 Location

The BB&D Company facility is located at 150-154 Raymond Boulevard, Essex County, Newark, New Jersey. The site is situated on approximately 15.22 acres of land. The site is bounded to the north by the Pulaski Skyway, Routes 1&9 to the west, the New Jersey Turnpike to the east and southeast, and the Multiplex Cinema to the south. See Map 1 - Boundary & Topographic Survey.

2.3 Soil Characteristics and Geology

The site is reportedly located in an old floodplain of the Passaic River. Site topography generally slopes to the east northeast across the site. Elevations of the property range from approximately 10 feet above mean sea level (MSL) to approximately 20 feet above MSL. Surface drainage follows the topography east to a series of storm drains along the eastern property line. The storm drains were constructed during the construction of the NJ Turnpike to re-direct the remaining flow of Harrison creek, which historically traversed this property. The storm drains are believed to discharge to the Passaic River.

The site is underlain by Pleistocene drift deposited during the Wisconsin glaciation. The drift is underlain by the Brunswick Formation. Soil lithologic data presented by Dan Raviv and Associates substantiate the presence of coal cinders and ash across the site to an average depth of ten feet below the surface elevation. Fill is reported at boring BBDC3 by Raviv to be underlain from approximately 10 feet to forty feet "by a medium to coarse grained, well sorted sand that ranges in color from brown to red-brown to dark maroon-brown. The material observed from forty to fifty feet below surface consists of a dark red-brown, uniform, coarse silt. Below fifty feet, small fragments of dark red shale were observed."

Although specific records are not available, the northern third of the property is also presumed to have been filled prior to the construction of the original buildings occupied by BB&D.

Fill material in the southern portions of the site consist of refuse of an undefined nature deposited by the City of Newark during the operations of the old Newark Landfill, currently referred to by the NJDEP as the 15E Sanitary Landfill". Fill material in the central portion of the site includes cinders and ash reportedly from a neighboring power generating facility.

This material was used as a construction base for the expansion of the BB&D facility.

2.4 Buildings and Structures

Nine (9) buildings currently exist at the site. All of the buildings are in various stages of deterioration. They are as follows:

- | | |
|---------|---|
| Bldg #1 | 29,000 sq. ft. Concrete block building used for the reconditioning of closed head drums, and for shot blasting open and closed head drums |
| Bldg #2 | 2,250 sq. ft. Drum staging building for preparation for the furnace and 760 sq. ft. Furnace for the cleaning of drums |
| Bldg #3 | 14,000 sq. ft. Concrete and brick building used to receive open head drums immediately after cleaning in the furnace |
| Bldg #4 | 20,000 sq. ft. Transite and steel building used for the reconditioning of open head drums |
| Bldg #5 | 4,000 sq. ft. Paint storage building |
| Bldg #6 | 5,400 sq. ft. Office building |
| Bldg #7 | 9,300 sq. ft. Machine shop and maintenance garage |
| Bldg #8 | 2,400 sq. ft. Boiler House |
| Bldg #9 | 1,750 sq. ft. Service Building |

In addition to the buildings referenced above, additional structures at the site include; a water separator trench, a 5,000 gallon separator tank, a 60,000 gallon above ground tank utilized for the settling of water prior to discharge to the sewer, two (2) underground collection tanks at the end of the furnace, and a collection/separator trench located adjacent to the furnace. Two (2) additional above ground storage tanks are located in the water separator area. These tanks were reportedly never put into service.

2.5 Operations Summary

RCRA empty open head drums and closed head drums were received at the facility via truck for reconditioning. According to the owner of BB&D, drums were received from a wide variety of industries involved in the production or handling of foodstuffs, chemicals, wastes, etc. Upon receipt, the drums were staged in rows according to client and/or drum type prior to processing or were transferred directly from incoming trucks to operation areas for reconditioning.

Drums were handled on a first-in, first-out basis. Empty drum storage areas were laid out in rows in such a fashion as to store one hundred drums in each tier to facilitate inventory control.

All drums were sorted with regard to size, gauge, customer and general condition. Drums received in small quantities were stored close to the beginning of each operation. Drums were transferred from yard storage to production areas with four specially designed trucks. Yard trucks were for onsite use only.

3.0 SITE HISTORY

The Bayonne Barrel & Drum Co. (BB&D) site consists of a 8.966 acre parcel of land described as lots 3, 5, and 16 in Block 5002, Newark, Essex County, New Jersey and a 5.539 acre parcel of property described as lot 14 in Block 5002, Newark Essex County, New Jersey owned Mr. Frank Langella. Mr. Langella leased this property to BB&D for use in connection with its recycling operation. These two properties are collectively referred to as 150 and 154 Raymond Boulevard Newark, New Jersey, which is the subject of this Workplan.

In the early 1980's, the site shut down and the owners filed for bankruptcy. The USEPA conducted site assessments of the property in 1984, 1988, and 1991, and in 1993 removed ignitable materials in abandoned trailers from the site. Following a fire at the site in 1994, the USEPA removed tanks and approximately 45,000 drums. In 1999, the remaining ash piles were removed by the USEPA.

3.1 Historical Use

Prior to BB&D's acquisition and use of lots 3, 5, and 16 in Block 5002, and its use of lot 14 in Block 5006, the property was subjected to numerous other sources of environmental contamination which are believed to persist at the property today and have a significant impact on the ability to identify and mitigate environmental contamination associated with BB&D's waste management activities.

3.2 Background Investigations

Substantial background information has been identified concerning the use and environmental condition of the BB&D properties and adjacent properties. This information includes the following reports: "*Preliminary Site Investigation*" and "*Results of Preliminary Investigations and Sampling in the Proposed NJ Turnpike Right-of-Way at Bayonne Barrel and Drum*", by Louis Berger & Associates, December, 1986; "*Results of Preliminary Investigations and Sampling in the Proposed NJ Turnpike Right-of-Way at the Newark Drive-in Property*", by Louis Berger & Associates, September, 1986; "*Soils and Groundwater Characterization Bayonne Barrel and Drum Company*", by Dan Raviv Associates, April, 1986; "*Summary Report on Test Pit and Monitoring Well Investigation at the Newark Drive-in*", by Wehran Engineering Corp., October, 1988; "*Preliminary Site Assessment Bayonne Barrel and Drum Company*", by Christopher S. E. Marlowe, August, 1988; "*RCRA Enforcement Inspection Bayonne Barrel and Drum Company*", USEPA, Region II, August, 1988; "*RCRA Closure Plan for Bayonne Barrel and Drum Company*", by Diversified Environmental Resources, Inc., January, 1990; "*Bayonne Barrel and Drum Site - Soil Investigation Report*", by Blasland, Bouck & Lee, Inc., March 1997; and "*Engineering Evaluation/Cost Analysis (EE/CA) for Removal Actions, Bayonne Barrel & Drum Site, Newark, New Jersey*", by Roy F. Weston, Inc., September 1997.

4.0 REGULATORY ISSUES

In addition to being required to comply with the RCRA Closure requirements established by the USEPA, BB&D and Frank Langella were also subject to other New Jersey State environmental regulations by virtue of the original uses of the property by others. The purpose of this section is to present an overview of the entire environmental regulatory scheme to which the BB&D property is currently subject and, to present our approach to satisfying applicable State and Federal regulations.

4.1 RCRA Closure

The Bayonne Barrel and Drum facility is subject to regulation under RCRA for Closure of "regulated units" associated with its management of hazardous waste. By removing the RCRA hazardous waste units associated with the former operations, the RCRA requirements can be met. The following units will be addressed under this plan:

- 1) The Furnace Courtyard Area
- 2) The Storage Tank Area

Both of these units have been identified by the USEPA as RCRA regulated units. In the case of BB&D, several New Jersey environmental rules and regulations may apply to various areas of the site, and must be addressed in order to properly close the site. These environmental rules and regulations and their applicability to the BB&D facility are discussed below.

4.2 TSCA Regulations

The Bayonne Barrel and Drum facility is subject to regulation under the Toxic Substance Control Act (TSCA) due to the presence of PCB's over 50 ppm. By removing the TSCA level PCB's associated with the Yard Area (surficial PCB's greater than 50 ppm), the TSCA requirements can be met.

4.3 Other Applicable NJ Environmental Regulations

4.3.1 NJ Sanitary Landfill Closure Regulations

The BB&D site is subject to closure as a sanitary landfill because it consists of a portion of the 15 E Sanitary Landfill". This landfill was only discovered by the NJDEP in 1986 as a result of investigations conducted for the widening of the New Jersey Turnpike. As a result of that discovery, all of the current owners of the 15 E Sanitary Landfill", were issued NJPDES Discharge to Groundwater (DGW) Permits. Both BB&D and Frank Langella have received such permits. The NJDEP reviewed and approved an application by National Amusements, Inc. to disrupt the old Newark Drive-In site on Lots 11 & 12 in Block 5002 to construct a Multiplex Cinema. This application did not propose removal of the contaminants in the landfill. Similarly the NJDEP reviewed and approved plans for the widening of the New

Jersey Turnpike through a portion of the BB&D property and a portion of the former Newark Drive-In property. These plans also did not call for removal of the landfilled waste.

It is anticipated that the NJDEP will require similar closure at each site in order to achieve environmental control of the entire landfill as a single unit. For this reason it is our position that due to the proposed capping of the site, a waiver of the landfill regulations will be requested.

4.3.2 NJ Industrial Site Recovery Act (ISRA)

BB&D, by virtue of its Standard Industrial Classification (SIC) Number and its management of hazardous materials and waste is subject to the NJ ISRA regulations at such time as the facility triggers ISRA. The ISRA review will encompass all areas of the property not subject to regulation under the NJ Solid Waste Management Act (NJSA 13:1E-1 et seq.) - (The NJ Solid Waste Management Act has been found to be equivalent to RCRA Subtitle C. Accordingly, ISRA will apply to all areas not subject to closure under this Workplan or the Landfill Closure regulations.)

Because all of the buildings will be demolished and the site capped, we will apply for a waiver of the ISRA regulations

4.3.3 NJPDES Regulation

The NJDEP had issued groundwater monitoring permits to all of the owners of the properties occupied by the 15 E Sanitary Landfill" including BB&D and Frank Langella. The landfill was categorized by the NJDEP as a Major Industrial Discharge. This monitoring program was developed by the NJDEP to assess the impact of the entire 15 E Sanitary Landfill, including the BB&D site. Because of the heterogeneous nature of landfills in general, and the demonstrated heterogeneity of the 15 E Sanitary Landfill" from studies by Wehran Engineering, Berger and Associates, and Raviv, it is believed that independent groundwater monitoring of the RCRA regulated units will be inconclusive as to the source of the contaminants.

Accordingly, we believe that the groundwater issue can be addressed via a Classification Exception Area (CEA).

4.4 State and Federal Regulations

The approach to satisfying state and Federal environmental regulations as described above are as follows:

- Close all hazardous waste management units described in section 4.1 in accordance with this plan.

- Address the sanitary landfill underlying the facility in accordance with the requirements of the sanitary landfill closure regulations through capping of the site.

5.0 DESCRIPTION OF SOLID WASTE MANAGEMENT UNITS

The following Solid Waste Management Units (SWMU) have been identified as areas of concern at the site:

1. Furnace Courtyard Area,
2. Storage Tank Area.

Information concerning these SWMU's and sampling results and interpretation from prior site investigations are summarized below.

5.1 Furnace Courtyard Area

5.1.1 Introduction

The furnace area is situated in approximately the center of the facility between the closed head and open head drum reconditioning buildings (Bldgs 1, 3 & 4). The furnace area consists of a 2,200 square foot, one (1) story concrete block building and a conveyor fed furnace which was fired with natural gas. The furnace is approximately ten feet wide by eighty feet long. RCRA empty drums were conveyed to the concrete receiving building where they were placed onto a separate conveyor entering the furnace. After the drums exited the furnace they were washed and cooled with a spray bath. Discharge waters from this process were collected in two (2) tanks and a trough located adjacent to the furnace and directed via underground pipes to the south end of the water separator for treatment. The two underground storage tanks situated at the end of the furnace were also used to temporarily contain wash residues.

5.1.2 Nature of Contaminants

Residual ash from the cleaning of drums is evident throughout the area of the furnace and therefore remedial activities to remove this material will be undertaken. In addition, floor sweepings and other drummed materials generated from cleanup of the interior of the remaining site buildings are currently stored within the one story building. These materials will be sampled and disposed of in accordance with current regulations.

In addition to the ash material in this area, solidified paints and/or other resinous materials are present. These materials predominate the surface area in the location of the feed end of the furnace. Although these solidified materials may not be characteristically hazardous, their presence suggests that organic contaminants may be present within this area.

Past results of samples collected by Raviv in 1985 indicate that a wide array of organic and inorganic contamination has occurred in the furnace area. Sampling was not conducted within this area by Berger during the NJ Turnpike proposed ROW sampling; this area was beyond the proposed ROW. In 1997 BB&L conducted a soil investigation program to determine the levels of contaminants remaining in the Furnace Courtyard Area. A total of eight (8) locations were

sampled, with ten (10) samples collected (Map 2 – Soil Sampling & Monitoring Well Locations). The samples were analyzed for TCL VOCs, SVOCs, PCBs and Organochlorine Pesticides, TAL metals, and PCDDs/PCDFs.

Results of BB&L sampling indicated that the depth to groundwater was less than 4 feet below grade. The volatiles most frequently detected were ethylbenzene, toluene and xylenes, with total concentration exceeding 10,000 ppm. Chlorinated volatile compounds were also detected, but at less often and at lower concentration (less than 1,000 ppm). Other detected chlorinated compounds included organochlorine pesticides (less than 10 ppm) and PCBs (generally less than 50 ppm). Metals were elevated above referenced urban background levels, with lead and chromium detected at the highest concentrations (above 10,000 ppm). When dioxin/dibenzofurans were converted to equivalent concentration of 2,3,7,8,-TCDD; the highest equivalent concentration was under 2 ppm.

5.2 Waste Water Separator Area

5.2.1 Introduction

The water separator area is located east of and adjacent to building No.1, the closed head drum reconditioning building. Waste waters and oil generated during the cleaning and reconditioning of closed head and open head drums were discharged to this area for treatment. Liquid wastes from the cleaning of closed head drums were directed from Building No.1 to the separator trench. Oil and water collected in the trough and tanks located in the furnace area were also directed to the trench. Primary treatment in this area included the physical separation of organics, water and solids. Waste water was separated initially in the trench and 5,000 gallon underground settling tank. Thereafter the water was pumped to the above ground 60,000 gallon storage tank for final separation. The remaining two storage tanks were never used due to the cessation of operations. Effluent water was discharged to the Passaic Valley Sewer Authority under permit after treatment.

5.2.2 Nature of Contaminants

Past sampling activities in the waste water treatment area have included the collection of samples by the NJDEP (1982), the USEPA (1984), Raviv (1985) and Berger (1985). Samples collected by the NJDEP and USEPA were predominantly representative of waste materials, although some environmental soil samples were analyzed by the NJDEP. In 1997 BB&L conducted a soil investigation program to determine the levels of contaminants remaining in the Furnace Courtyard Area. A total of three (3) locations were sampled, with three (3) samples collected (Map 2 – Soil Sampling & Monitoring Well Locations). Because of the shallow groundwater table, the samples were collected from the two-foot interval immediately above the water table. The samples were analyzed for TCL VOCs, SVOCs, PCBs and Organochlorine Pesticides, TAL metals, and PCDDs/PCDFs.

Results of the BB&L samples indicated contaminants similar to the Furnace Courtyard Area were identified. Groundwater was encountered at 2-3 feet below grade. BTEX constituents were the predominant volatiles, although some chlorinated contamination was also present at levels of approximately 2 orders of magnitude. SVOCs included phthalates (less than 600 ppm) and PAHs (generally less than 10 ppm), organochlorine pesticides (less than 10 ppm) and PCBs (less than 30 ppm). Lead and zinc were detected at over 10,000 ppm. Dioxins/dibenzofurans were detected at a maximum equivalent concentration of less than 3 ppm.

6.0 REMEDIAL ACTION WORKPLAN

This Workplan has been designed to control, minimize or eliminate the escape of environmental contaminants and hazardous substances identified at the site, which are related to the generation and storage of hazardous wastes from the drum reconditioning operations, and minimize the need for future maintenance. This plan addresses Solid Waste Management Units (SWMU's) used to store RCRA hazardous wastes in excess of 90 days.

Additional areas not identified as a solid waste management units, but which are subject to this closure as described in Sections 4 & 5 of this plan, include the excavation of soils in the Yard Area.

6.1 Furnace Courtyard Area

Because of the extensive sampling already conducted in this area, no further sampling is proposed.

6.1.1 Furnace Demolition

The furnace will be demolished and loaded into trucks for off-site disposal. Scrap metal and/or other reclaimable debris will be recycled where possible. All materials removed for recycling and not manifested as a regulated material will be accompanied with a Straight-Bill-Of-Lading for tracking purposes.

6.1.2 Remediation of Soil Contamination

Because the site will be redeveloped for commercial non-residential use, further delineation is not proposed. Once the furnace is demolished and the buildings/structures are removed and disposed, this area will be capped with asphalt and concrete (building slabs).

6.2. Storage Tank Area

Based upon information from BB&D, the water separator trench and tanks were used to separate primarily solids from the liquid waste wash water generated during the closed head drum cleaning operation and the cooling of drums exiting the furnace. Although oils and organics were reported to occur within the liquid in small amounts, the separated materials primarily consisted of solids.

Sediments are currently present within the trench and underground 5,000 gallon settling tank. Although this material may be residue from site operations, it is believed to probably reflect wind blown materials that have collected since cessation of site operations in 1983.

6.2.1 Treatment Tank Cleaning

Based upon the analytical results of samples collected from the sediment and water within these structures, water will be removed from the separator trench, 5,000 gallon separator tank and 60,000 gallon above ground tank (if applicable) and disposed of in accordance with current regulations or discharged to a sanitary sewer under permit. Thereafter, the trench and tanks will be cleaned of all sediment for subsequent disposal.

If visible petroleum stains are present on these structures after removal of all sediments, the trench and separator tanks will be decontaminated using low volume, high pressure water.

Wash waters generated during the decontamination of the above referenced structures will be containerized and disposed of in accordance with current regulations or discharged to the sanitary sewer under permit.

6.2.2 Remediation of Soil Contamination

Because the site will be redeveloped for commercial non-residential use, further delineation is not proposed. Once the furnace is demolished and the buildings/structures are removed and disposed, this area will be capped with asphalt and concrete (building slabs).

6.3. Yard Area

Based upon information from the BB&L Yard Area soil boring program, volatile were detected at much lower levels than in the Furnace Courtyard and Storage Tank areas (Map 2 – Soil Sampling & Monitoring Well Locations). PAH's were detected at levels slightly over 200 ppm, phthalates to 17 ppm, organopesticides to 4 ppm, and PCB's to less than 30 ppm. Dioxins were detected at levels generally less than an equivalent concentration of 10 ppb, with one (1) sample (0-2') at 212 ppb. PCB's were detected at numerous locations in the surface soils, with levels generally less than 20 ppm, however several locations exhibited PCB's at levels over 100 ppm. Lead was generally detected in the 1,000 to 10,000 ppm range. Total TCDD equivalents were measured in all samples, with maximum concentrations approaching 1 ppm, while most concentrations were less than 0.01 ppm.

Due to the elevated levels of PCB's detected in the surface soils, On February 19, 2001, Cilli Environmental Group, LLC (CEG) performed a surface soil investigation along the southern property boundary. A total of 18 soil borings were advanced to a depth of two (2) feet below grade on a 25 foot grid. The borings were visually observed for contamination, logged for physical characteristics, and one (1) soil sample was collected from each boring and submitted to a New Jersey certified analytical laboratory for PCB analysis.

A review of the analytical results indicates that PCB's were present in all 18 soil samples at concentrations ranging from 1.24 to 118.4. However, only three (3) samples contained PCB concentration above 50 ppm.

Based on the previous surface soil sampling results compiled by BB&L, and the results of the February, 2001 surface soil sampling, a statistical modeling of the areal extent of PCB concentrations above 50 ppm was completed. As shown on Map 3 - Areas of Concern, there are four (4) distinct areas (AOC-1A, 1B, 1C, and 1D) on the southern portion of the property containing PCB's above 50 ppm. The approximate quantity of soil to be removed from each area is estimated to be: *AOC-1A* - 50 cubic yards, *AOC-1B* - 250 cubic yards, *AOC-1C* - 115 cubic yards, and *AOC-1D* - 50 cubic yards. Using a 1.4 conversion ratio (tons/cubic yards) the amount of soil to be removed is approximately 650 tons.

6.3.1 Remediation of Soil Contamination

Based on the above findings, PCB remediation of the four (4) areas in the "Yard Area" to below TSCA levels can be successfully accomplished via excavation and disposal. Because the site will be redeveloped for commercial non-residential use, further delineation is not proposed. Once the furnace is demolished and the buildings/structures are removed and disposed, the yard area will be capped with asphalt.

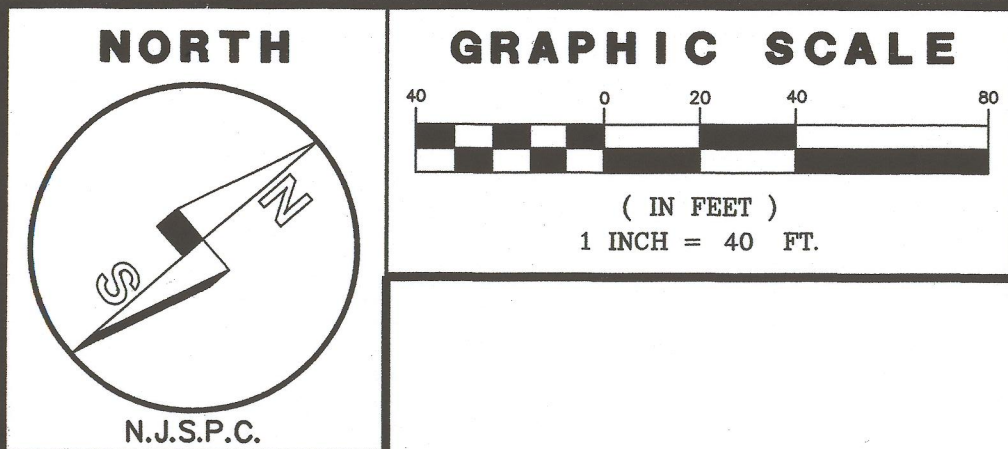
6.4. Capping Plan

BarBar, LLC proposes to implement the following engineering controls at the site. Placement of a minimum 6 inch cap of impervious rolled asphalt over all of the unpaved areas of the site. Together with the proposed concrete building slabs, this would provide a 6 inch to 14 inch thick impervious cap on the entire site. This capping would reduce and/or eliminate infiltration of surface water and subsequent leaching of contaminants into the groundwater and ensure the protection of the public health and safety, and the environment.

Prior to placement of the capping material, the interior of the site will be cleared of vegetation and then the site will be rough graded. The asphalt will then be placed and installed utilizing asphalt paving equipment.

Inspection of the cap will consist of an annual inspection of the entire site, at a minimum, and an evaluation of the cap. The results of the inspections and maintenance and any disturbances of the controls will be documented in a logbook, which will be made available on request.

The impermeable capped areas including building slabs and asphalt paved areas will be routinely evaluated and maintained. All cracks, damage or wear will be repaired. Any breaches of the cap or in the stability of the cap (i.e., cracking or deterioration of asphalt surfaces) identified during the routine inspections will be repaired accordingly.

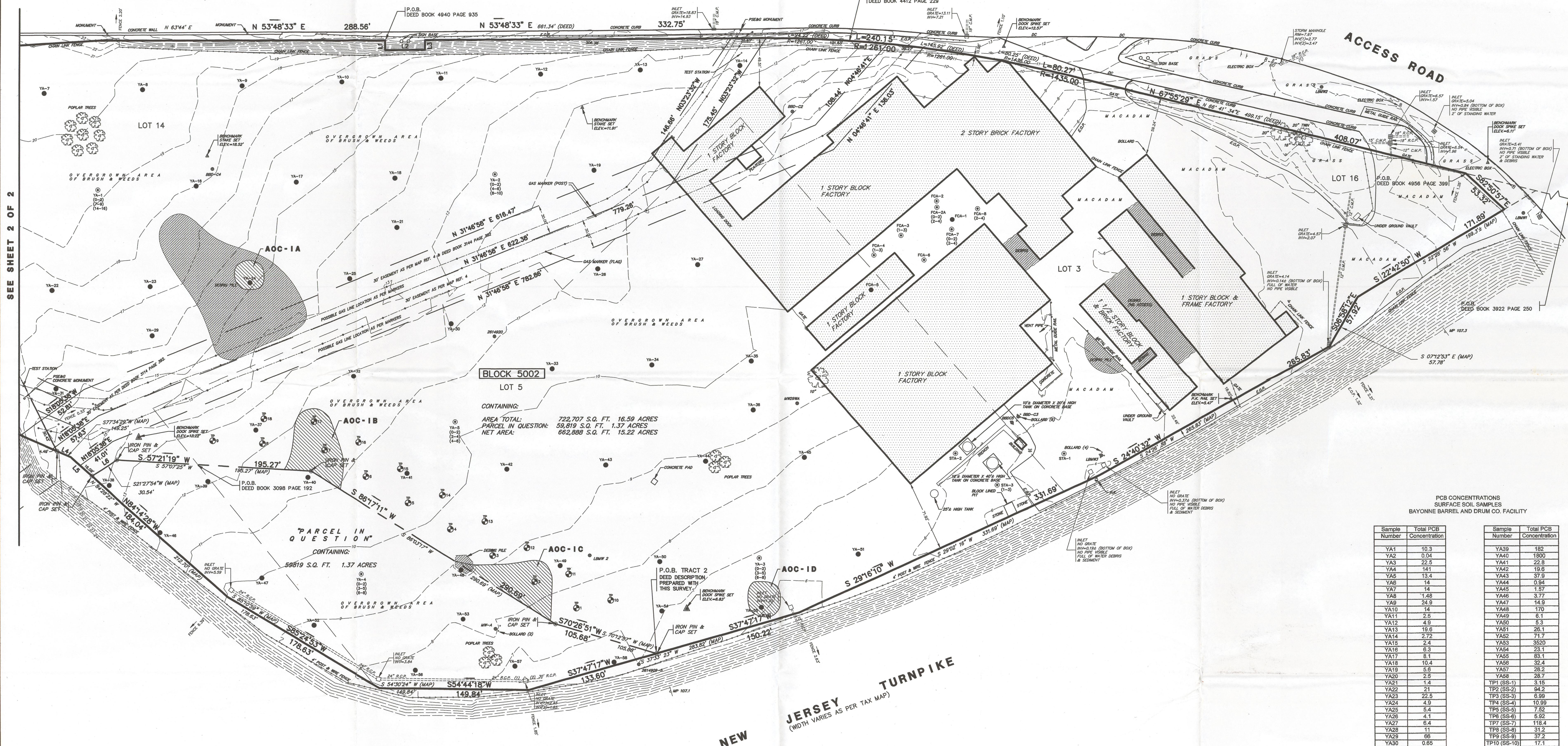


ROUTE U.S. 1 & U.S. 9

(WIDTH VARIES AS PER TAX MAP)

PLAN LEGEND

- YARD AREA SURFACE SAMPLE LOCATION
SURFACE SAMPLE ONLY, e.g. YA-42
 - ⊙ YARD AREA BORING LOCATION
SURFACE & SUBSURFACE SAMPLE, e.g. YA-4
(0-2)
(2-4)
 - ⊙ OR ● FURNACE COURTYARD AREA SAMPLE LOCATION
e.g. FCA-2
 - ⊙ STORAGE TANK AREA SAMPLE LOCATION
e.g. STA-2
 - ⊙ SURFACE SAMPLE LOCATIONS TAKEN FEBRUARY 19,
2001. SKETCH OF SAMPLE LOCATIONS PROVIDED BY
CILLI ENVIRONMENTAL GROUP, L.L.C.
 - RD ROOF DRAIN
 - DC DEPRESSURE CURB
 - UTILITY POLE
 - ⊙ FIRE HYDRANT
 - ⊙ WATER VALVE
 - ⊙ GAS VALVE
 - ⊙ GAS BOX
 - ⊙ LIGHT POLE
 - ⊙ TREE
 - ⊙ SHRUB
 - ⊙ GAS MARK OUT
 - ⊙ WATER MARK OUT
 - E.O.P. EDGE OF PAVEMENT
 - △ SIGN
 - △ SURVEY POINT
 - ⊙ SANITARY MANHOLE
 - ⊙ WATER MANHOLE
 - ⊙ ELECTRIC MANHOLE
 - ⊙ TELEPHONE MANHOLE
 - ⊙ DRAINAGE MANHOLE
 - ⊙ GAS MANHOLE
 - ⊙ D.O.T. MANHOLE
 - ⊙ INLET
 - ⊙ MONITORING WELL
- S06°58'12"E SURVEY BEARING
S 07°12'53" E DEED OR MAP BEARING



PCB CONCENTRATIONS
SURFACE SOIL SAMPLES
BAYONNE BARREL AND DRUM CO. FACILITY

| Sample Number | Total PCB Concentration | Sample Number | Total PCB Concentration |
|---------------|-------------------------|---------------|-------------------------|
| YA1 | 10.3 | YA39 | 182 |
| YA2 | 0.04 | YA40 | 1800 |
| YA3 | 22.5 | YA41 | 22.9 |
| YA4 | 141 | YA42 | 19.6 |
| YA5 | 13.4 | YA43 | 37.9 |
| YA6 | 14 | YA44 | 0.94 |
| YA7 | 1.4 | YA45 | 1.57 |
| YA8 | 1.48 | YA46 | 3.77 |
| YA9 | 24.9 | YA47 | 14.9 |
| YA10 | 14 | YA48 | 170 |
| YA11 | 2.5 | YA49 | 6.1 |
| YA12 | 4.9 | YA50 | 5.3 |
| YA13 | 19.6 | YA51 | 26.1 |
| YA14 | 2.72 | YA52 | 71.7 |
| YA15 | 2.4 | YA53 | 3520 |
| YA16 | 6.3 | YA54 | 23.1 |
| YA17 | 8.1 | YA55 | 83.1 |
| YA18 | 10.4 | YA56 | 32.4 |
| YA19 | 5.6 | YA57 | 28.2 |
| YA20 | 2.5 | YA58 | 28.7 |
| YA21 | 1.4 | TP1 (SS-1) | 3.15 |
| YA22 | 2.1 | TP2 (SS-2) | 84.2 |
| YA23 | 22.5 | TP3 (SS-3) | 6.89 |
| YA24 | 4.9 | TP4 (SS-4) | 10.99 |
| YA25 | 5.4 | TP5 (SS-5) | 7.52 |
| YA26 | 4.1 | TP6 (SS-6) | 5.92 |
| YA27 | 6.4 | TP7 (SS-7) | 116.4 |
| YA28 | 11 | TP8 (SS-8) | 31.2 |
| YA29 | 86 | TP9 (SS-9) | 37.2 |
| YA30 | 0.85 | TP10 (SS-10) | 17.1 |
| YA31 | 7 | TP11 (SS-11) | 10.63 |
| YA32 | 34.1 | TP12 (SS-12) | 10.21 |
| YA33 | 13.8 | TP13 (SS-13) | 20.1 |
| YA34 | 7.6 | TP14 (SS-14) | 3.08 |
| YA35 | 2.47 | TP15 (SS-15) | 10.26 |
| YA36 | 10.4 | TP16 (SS-16) | 1.24 |
| YA37 | 11.95 | TP17 (SS-17) | 104.9 |
| YA38 | 18.5 | TP18 (SS-18) | 26.55 |

REFERENCE

THIS PLAN IS BASED ON "BOUNDARY & TOPOGRAPHIC SURVEY", PREPARED BY NEGLIA ENGINEERING ASSOCIATES, SHEETS 1 OF 2 & 2 OF 2, DATED SEPTEMBER 26, 2000.

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE RAISED IMPRESSION SEAL OF THE PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT AND MAY HAVE BEEN ALTERED.

| REVISIONS | | | |
|-----------|------|-------------|--|
| NO. | DATE | DESCRIPTION | |
| | | | |
| | | | |
| | | | |



MARTIN L. SIKORSKI P.L.S., P.P., C.L.A.

PROFESSIONAL LAND SURVEYOR PROFESSIONAL PLANNER

N.J. LICENSE NO. 36760 N.J. LICENSE NO. 5532

CERTIFIED LANDSCAPE ARCHITECT

N.J. LICENSE NO. AS00226

Martin L. Sikorski

A PROJECT OF

NEGLIA ENGINEERING ASSOCIATES

34 PARK AVENUE LYNDHURST NEW JERSEY

TEL: 201-939-8805 FAX: 201-939-0846 nea@negliaengineering.com

MICHAEL J. NEGLIA

PROFESSIONAL ENGINEER PROFESSIONAL LAND SURVEYOR

N.J. LICENSE NO. 38604 N.J. LICENSE NO. 38604

AREAS OF CONCERN

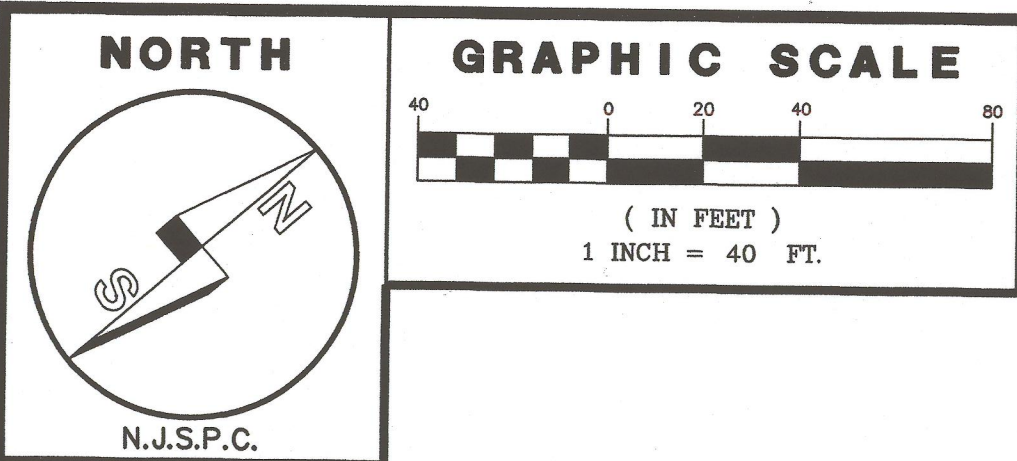
BLOCK 5002 LOT 3, 5, 14, 16

CITY OF NEWARK

ESSEX COUNTY NEW JERSEY

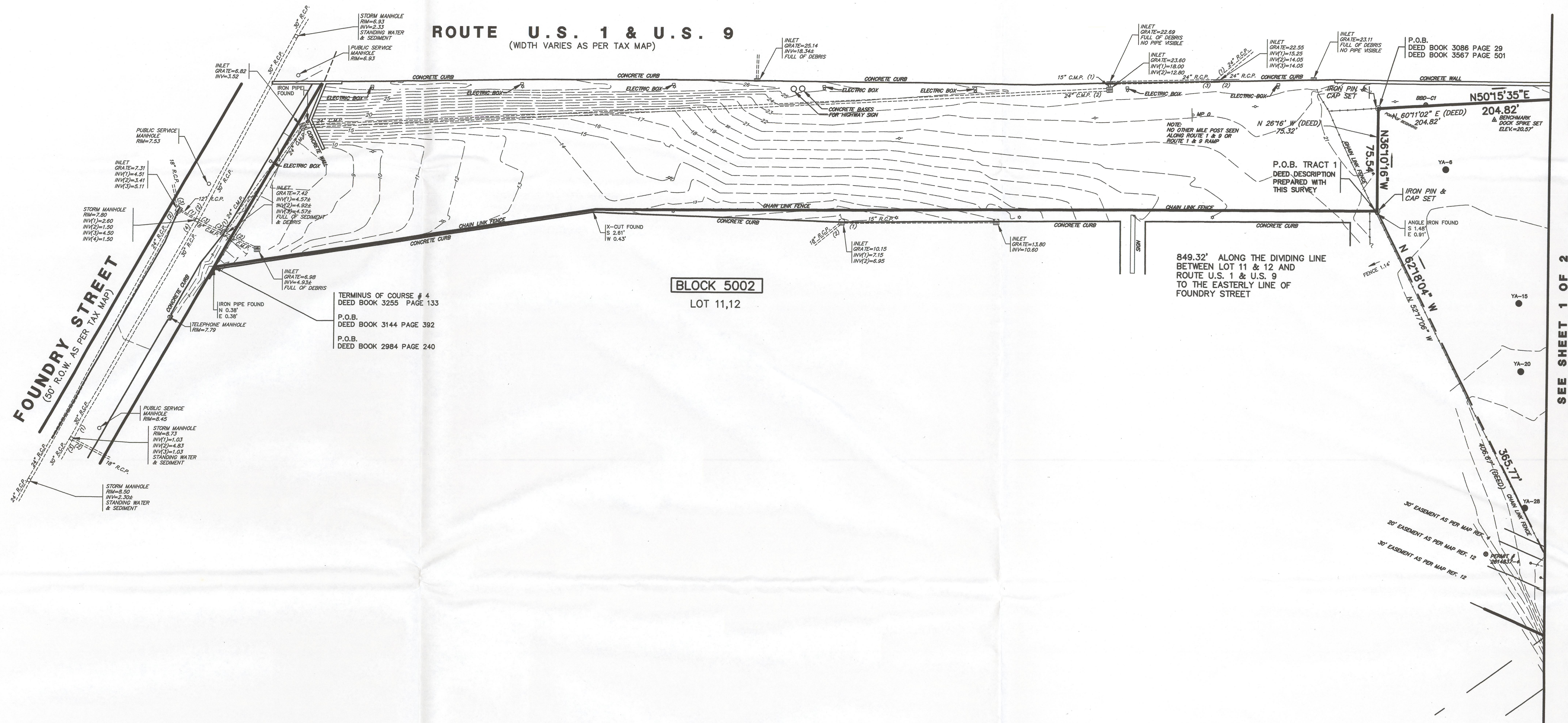
DRAWN BY: J.B. CHECKED BY: M.L.S. PROJECT NO.: 99771 SHEET NO.: 1 OF 2

DESIGNED BY: M.L.S. SCALE: 1"=40' FIELD BOOK NO.: 339 PAGE: 6 DATE: SEPTEMBER 26, 2000



NJSH DEPT. GENERAL PROPERTY KEY MAP, SHEET 5 OF 6
DEC. 1940 PORT ST. TO FOUNDRY ST.

ROUTE U.S. 1 & U.S. 9
(WIDTH VARIES AS PER TAX MAP)



SEE SHEET 1 OF 2

REFERENCE
THIS PLAN IS BASED ON "BOUNDARY & TOPOGRAPHIC SURVEY", PREPARED BY NEGLIA ENGINEERING ASSOCIATES, SHEETS 1 OF 2 & 2 OF 2, DATED SEPTEMBER 26, 2000.

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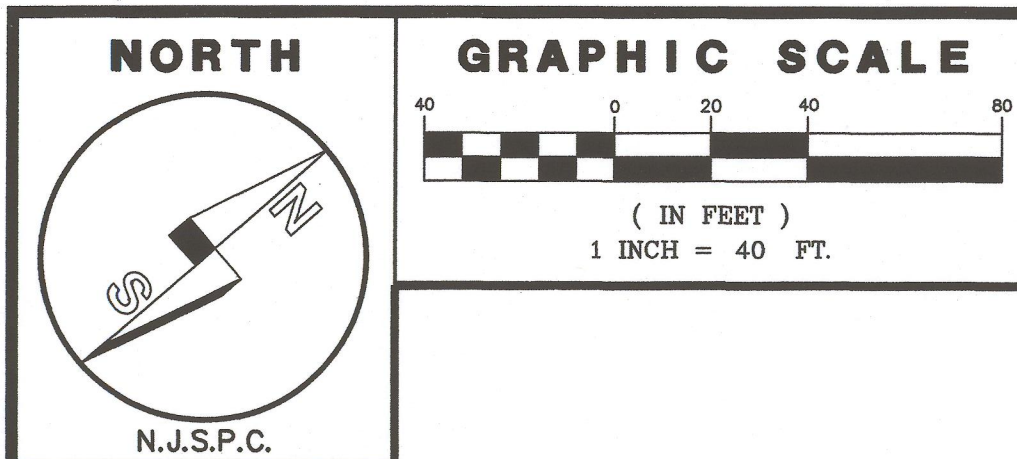


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MICHAEL J. NEGLIA
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N.J. LICENSE NO. 38604

**SOIL SAMPLE
& MONITORING WELL LOCATIONS
BLOCK 5002 LOT 3, 5, 14, 16
CITY OF NEWARK
ESSEX COUNTY NEW JERSEY**

DRAWN BY: J.B. CHECKED BY: *MB*
DESIGNED BY: M.L.S. SCALE: 1"=40'
FIELD BOOK NO.: 339 PAGE: 6
PROJECT NO.: 99771 SHEET NO.: 2 OF 2
DATE: SEPTEMBER 26, 2000

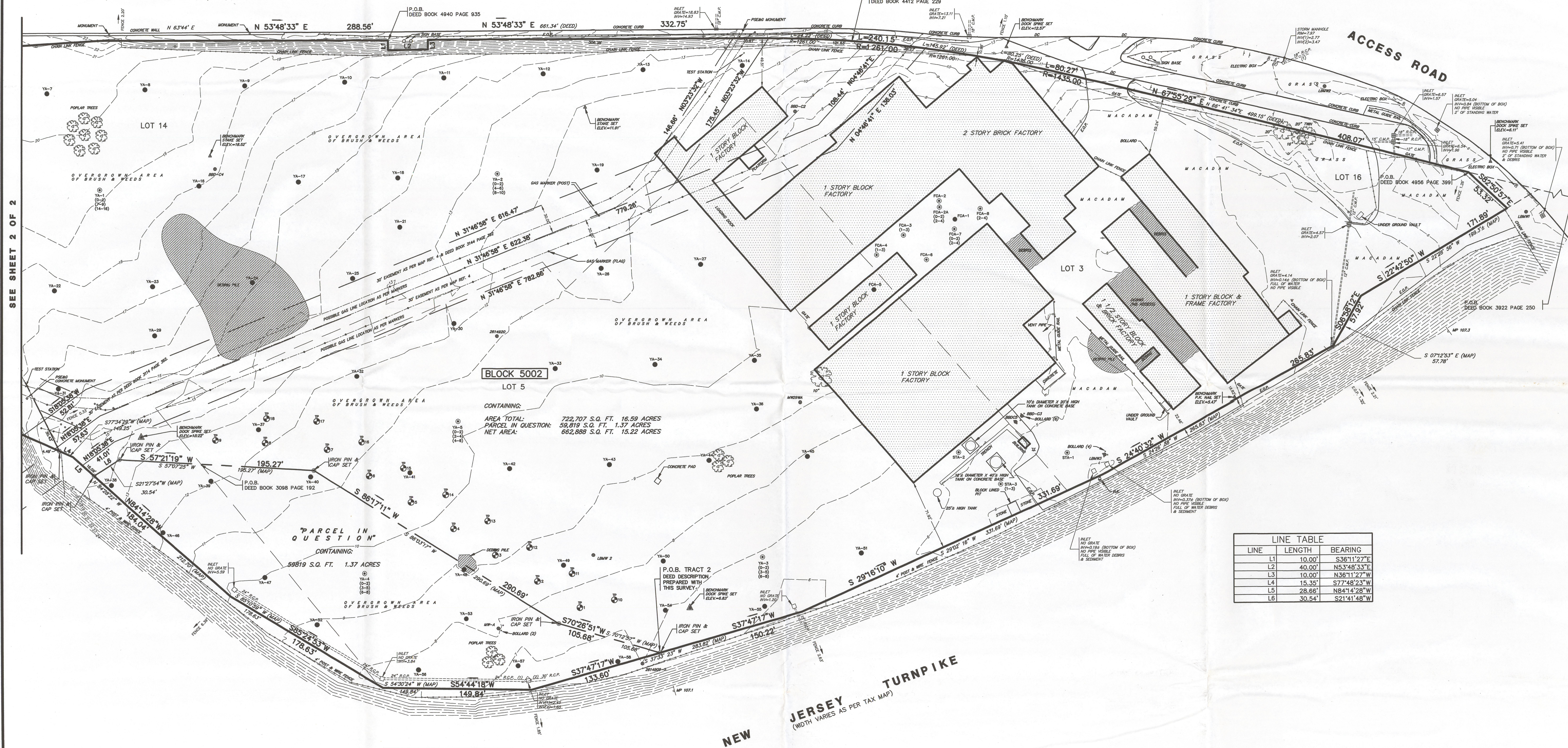


ROUTE U.S. 1 & U.S. 9
(WIDTH VARIES AS PER TAX MAP)

PLAN LEGEND

- YARD AREA SURFACE SAMPLE LOCATION
SURFACE SAMPLE ONLY, e.g. YA-42
- YARD AREA BORING LOCATION
SURFACE & SUBSURFACE SAMPLE, e.g. YA-4
(0-2)
(2-4)
- FURNACE COURTYARD AREA SAMPLE LOCATION
e.g. FCA-2
- STORAGE TANK AREA SAMPLE LOCATION
e.g. STA-2
- SURFACE SAMPLE LOCATIONS TAKEN FEBRUARY 19, 2001. SKETCH OF SAMPLE LOCATIONS PROVIDED BY CILLI ENVIRONMENTAL GROUP, L.L.C.
- RD ROOF DRAIN
- DC DEPRESSURE CURB
- UTILITY POLE
- FIRE HYDRANT
- WATER VALVE
- GAS VALVE
- GAS BOX
- LIGHT POLE
- TREE
- SHRUB
- GAS MARK OUT
- WATER MARK OUT
- EDG.P. EDGE OF PAVEMENT
- SIGN
- SURVEY POINT
- SANITARY MANHOLE
- WATER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE MANHOLE
- GAS MANHOLE
- D.O.T. MANHOLE
- INLET
- MONITORING WELL

S06°58'12"E SURVEY BEARING
S 07°12'53" E DEED OR MAP BEARING

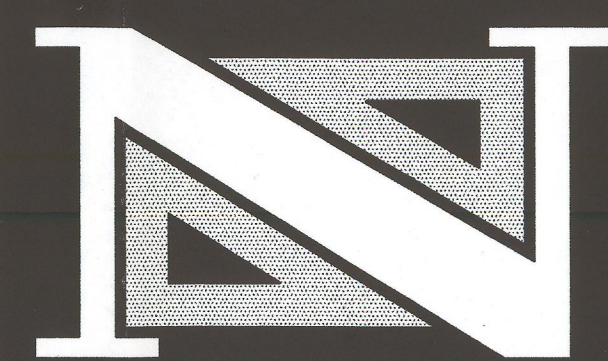


| LINE TABLE | | |
|------------|--------|-------------|
| LINE | LENGTH | BEARING |
| L1 | 10.00' | S36°11'27"E |
| L2 | 40.00' | N53°48'33"E |
| L3 | 10.00' | S36°11'27"W |
| L4 | 15.35' | S77°48'23"W |
| L5 | 28.66' | N84°14'28"W |
| L6 | 30.54' | S21°41'48"W |

REFERENCE
THIS PLAN IS BASED ON "BOUNDARY & TOPOGRAPHIC SURVEY", PREPARED BY NEGLIA ENGINEERING ASSOCIATES, SHEETS 1 OF 2 & 2 OF 2, DATED SEPTEMBER 26, 2000.

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| REVISIONS | | | | |
|-----------|------|-------------|-------|---------|
| NO. | DATE | DESCRIPTION | DRAWN | CHECKED |
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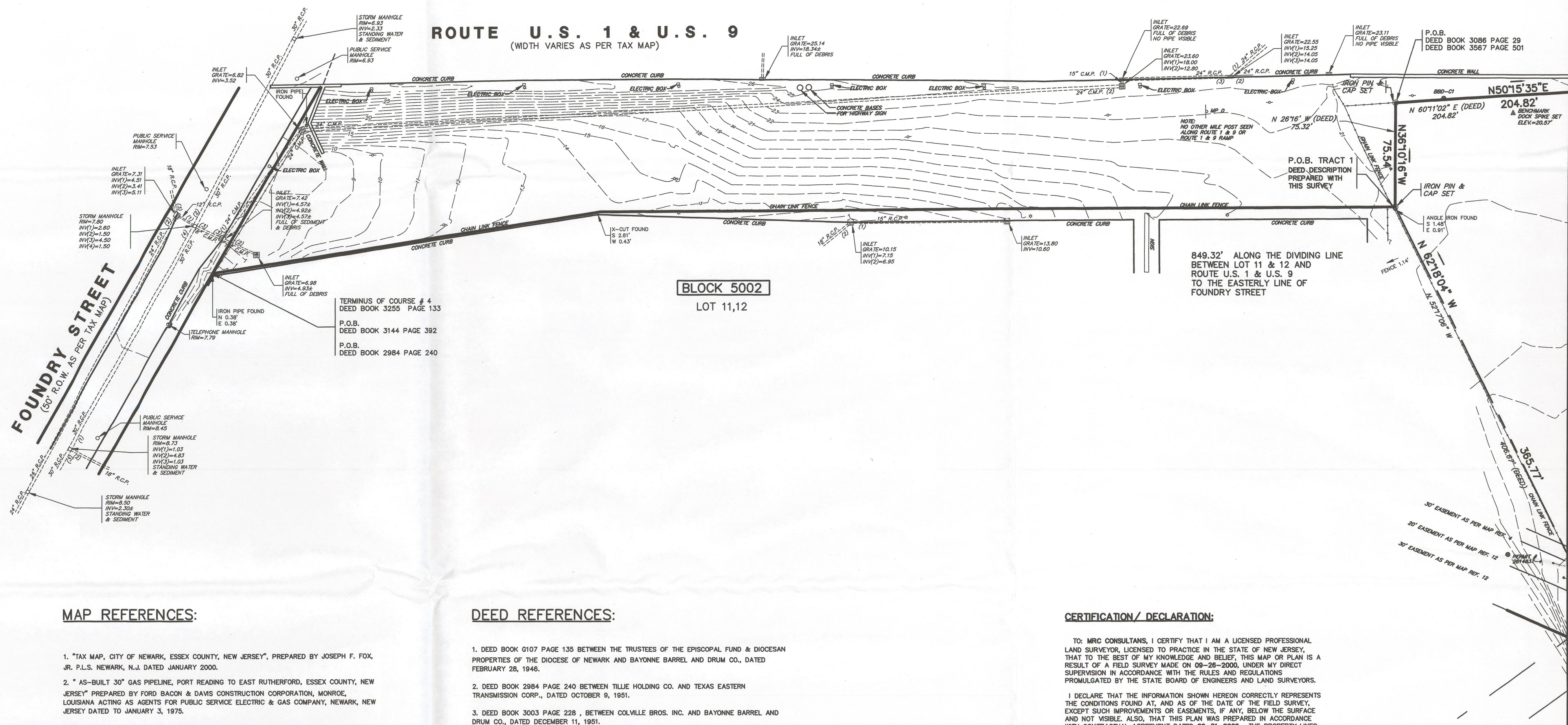
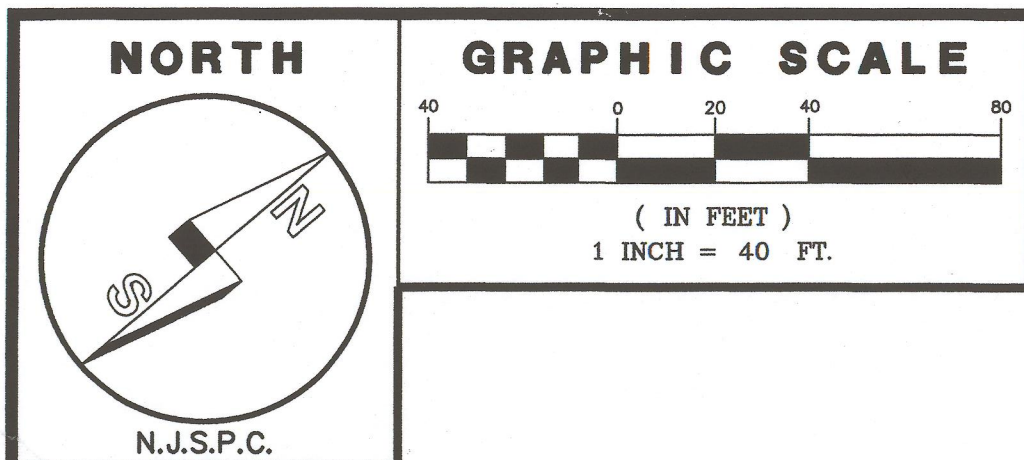
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N.J. LICENSE NO. 36760
PROFESSIONAL PLANNER
N.J. LICENSE NO. 5532
CERTIFIED LANDSCAPE ARCHITECT
N.J. LICENSE NO. A500226

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N.J. LICENSE NO. 38604
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N.J. LICENSE NO. 38604

| SOIL SAMPLE & MONITORING WELL LOCATIONS | | | |
|---|------------------|--------------------------|-------------------|
| BLOCK 5002 LOT 3, 5, 14, 16 | | | |
| CITY OF NEWARK | | | |
| ESSEX COUNTY NEW JERSEY | | | |
| DRAWN BY: J.B. | CHECKED BY: M.W. | PROJECT NO.: 99771 | SHEET NO.: 1 OF 2 |
| DESIGNED BY: M.L.S. | SCALE: 1"=40' | DATE: SEPTEMBER 26, 2000 | |
| FIELD BOOK NO.: 339 | PAGE: 6 | | |

#2



SEE SHEET 1 OF 2

MAP REFERENCES:

- "TAX MAP, CITY OF NEWARK, ESSEX COUNTY, NEW JERSEY", PREPARED BY JOSEPH F. FOX, JR. P.L.S. NEWARK, N.J. DATED JANUARY 2000.
- "AS-BUILT 30" GAS PIPELINE, PORT READING TO EAST RUTHERFORD, ESSEX COUNTY, NEW JERSEY" PREPARED BY FORD BACON & DAVIS CONSTRUCTION CORPORATION, MONROE, LOUISIANA ACTING AS AGENTS FOR PUBLIC SERVICE ELECTRIC & GAS COMPANY, NEWARK, NEW JERSEY DATED TO JANUARY 3, 1975.
- "MONITORING WELL LOCATION SURVEY FOR: WESTERN ENVIRONMENTAL SITE: BAYONNE BARREL, CITY OF NEWARK, ESSEX COUNTY, NEW JERSEY" PREPARED BY RONALD W. POST SURVEYING, INC., DATED DECEMBER 10, 1998.
- "SURVEY OF PROPERTY IN THE CITY OF NEWARK, ESSEX COUNTY, NEW JERSEY" PREPARED BY GRASSMANN, KREH & MIXER, INC., DATED SEPTEMBER 18, 1973.
- "NEW JERSEY STATE HIGHWAY DEPARTMENT, ROUTE 25 CONNECTING LINK-SECTION 8A, GENERAL PROPERTY KEY MAP SHOWING PROPERTIES TO BE ACQUIRED FOR RAMP CONNECTION AT FOUNDRY STREET, CITY OF NEWARK, ESSEX COUNTY" PREPARED BY THE OFFICE OF ASST. CONST. ENGR., JERSEY CITY, N.J. DATED JUNE 20, 1930.
- "NEW JERSEY STATE HIGHWAY DEPARTMENT GENERAL PROPERTY KEY MAP ROUTE 25 (REV. 1927) SECTION 28, DOWN RAMP TO OLD LINCOLN HIGHWAY (RAYMOND BOULEVARD), SHOWING EXISTING RIGHT OF WAY & PARCELS TO BE ACQUIRED IN THE CITY OF NEWARK, ESSEX COUNTY", DATED JULY 1937.
- "NEW JERSEY STATE HIGHWAY DEPARTMENT GENERAL PROPERTY KEY MAP, ROUTE 25 (1927) SECTION 34, PORT STREET TO FOUNDRY STREET, SHOWING EXISTING RIGHT OF WAY & PARCELS TO BE ACQUIRED IN THE CITY OF NEWARK, ESSEX COUNTY", DATED DECEMBER 1940.
- "NEW JERSEY STATE HIGHWAY DEPARTMENT PLAN SHEET, ROUTE U.S. 1&9 (1953) SECTION 2, ROUTE U.S. 1&9 TRUCK (1953) SECTION 1, RAMP REVISIONS, GRADING, PAVING & BRIDGES", DATED APRIL 1984.
- "NEW JERSEY DEPARTMENT OF TRANSPORTATION GENERAL PROPERTY PARCEL MAP, ROUTE U.S. 1 & U.S. 9, AT WEST END OF PULASKI SKYWAY TO TONNELLE AVENUE CIRCLE SHOWING EXISTING RIGHT OF WAY AND PARCELS TO BE ACQUIRED IN THE CITY OF NEWARK, COUNTY OF ESSEX AND IN THE TOWN OF KEARNY AND CITY OF JERSEY CITY, COUNTY OF HUDSON", DATED APRIL 1984.
- "NEW JERSEY DEPARTMENT OF TRANSPORTATION GENERAL PROPERTY PARCEL MAP, ROUTE U.S. 1 & U.S. 9 (1953) SECTION 2, PASSAIC RIVER TO UNION COUNTY LINE, SHOWING EXISTING RIGHT OF WAY AND PARCELS TO BE ACQUIRED IN THE CITY OF NEWARK COUNTY OF ESSEX" DATED MAY 1985.
- "NEW JERSEY TURNPIKE AUTHORITY, NEW JERSEY TURNPIKE PARCEL PROPERTY MAP, SECTION NO. 6 STATION 442+30.0 TO STATION 472+34.6; NEWARK, ESSEX COUNTY" PREPARED BY BORRIE & McDONALD, SURVEYORS DATED MARCH 28, 1977.
- "NEW JERSEY TURNPIKE AUTHORITY, NEW JERSEY TURNPIKE 1969 WIDENING SECTION NO. 60-MILE105 TO MILE 107, PARCEL PROPERTY MAP, CITY OF NEWARK, ESSEX COUNTY" PREPARED BY GOODKIND & O'DEA, INC. AND HAYDEN, HARDING & BUCHANAN, INC., MONTCLAIR, NEW JERSEY, DATED TO AUGUST 10, 1988.
- "BAYONNE BARREL AND DRUM COMPANY NEWARK, NEW JERSEY, SAMPLING AND ANALYSIS PROGRAM, SOIL SAMPLING LOCATIONS," PREPARED BY BLASLAND, BOUCK & LEE, INC. DATED FEBRUARY 27, 1997.
- SKETCH OF SURFACE SAMPLE LOCATIONS FAXED ON 03-20-01 BY CHILLI ENVIRONMENTAL GROUP, L.L.C.

DEED REFERENCES:

- DEED BOOK 6107 PAGE 135 BETWEEN THE TRUSTEES OF THE EPISCOPAL FUND & DIOCESAN PROPERTIES OF THE DIOCESE OF NEWARK AND BAYONNE BARREL AND DRUM CO., DATED FEBRUARY 28, 1946.
- DEED BOOK 2984 PAGE 240 BETWEEN TILLIE HOLDING CO. AND TEXAS EASTERN TRANSMISSION CORP., DATED OCTOBER 9, 1951.
- DEED BOOK 3003 PAGE 228, BETWEEN COLVILLE BROS. INC. AND BAYONNE BARREL AND DRUM CO., DATED DECEMBER 11, 1951.
- DEED BOOK 3086 PAGE 29, BETWEEN GENEROSO PACULLO & MARY PACULLO AND FRANK LANGELLA & DANIEL PACULLO, DATED DECEMBER 26, 1951.
- DEED BOOK 3098 PAGE 192, BETWEEN NEW JERSEY TURNPIKE AUTHORITY AND BAYONNE BARREL AND DRUM CO., DATED DECEMBER 10, 1952.
- DEED BOOK 3144 PAGE 392, BETWEEN TEXAS EASTERN TRANSMISSION CORP. AND PUBLIC SERVICE ELECTRIC & GAS CO., DATED MARCH 25, 1953.
- DEED BOOK 3255 PAGE 133, BETWEEN HENRY L. SCHWARTZ & CAROLINE SCHWARTZ AND EDLE REALTY INC., DATED SEPTEMBER 8, 1954.
- DEED BOOK 3471 PAGE 329, BETWEEN BAYONNE BARREL AND DRUM CO., AND NEW JERSEY TURNPIKE AUTHORITY, DATED FEBRUARY 12, 1957.
- DEED BOOK 3567 PAGE 501, BETWEEN DANIEL PACULLO & LENA PACULLO AND FRANK LANGELLA, DATED JUNE 18, 1958.
- DEED BOOK 3801 PAGE 500, BETWEEN OGDEN CORP., AND EDLE REALTY INC., DATED JULY 11, 1961.
- DEED BOOK 3922 PAGE 250, BETWEEN STATE OF NEW JERSEY AND BAYONNE BARREL AND DRUM CO., DATED DECEMBER 20, 1962.
- DEED BOOK 4095 PAGE 99, BETWEEN FRANK C. MCCANN STONE CO. AND EDLE REALTY INC., DATED MAY 17, 1965.
- DEED BOOK 4410 PAGE 342, BETWEEN BAYONNE BARREL AND DRUM CO. AND NEW JERSEY TURNPIKE AUTHORITY, DATED MAY 23, 1972.
- DEED BOOK 4412 PAGE 226, BETWEEN FRANK A. LANGELLA & ANGELINE LANGELLA AND BAYONNE BARREL AND DRUM CO., DATED JUNE 23, 1972.
- DEED BOOK 4940 PAGE 935, BETWEEN STATE OF NEW JERSEY, PLAINTIFF VS. FRANK LANGELLA, DEFENDANT, DATED OCTOBER 20, 1986.
- DEED BOOK 4956 PAGE 395, BETWEEN STATE OF NEW JERSEY, PLAINTIFF VS. BAYONNE BARREL AND DRUM CO., DATED FEBRUARY 6, 1987.

CERTIFICATION / DECLARATION:

TO: MRC CONSULTANTS, I CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF NEW JERSEY, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP OR PLAN IS A RESULT OF A FIELD SURVEY MADE ON 08-26-2000, UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE RULES AND REGULATIONS PROMULGATED BY THE STATE BOARD OF ENGINEERS AND LAND SURVEYORS. I DECLARE THAT THE INFORMATION SHOWN HEREON CORRECTLY REPRESENTS THE CONDITIONS FOUND AT, AND AS OF THE DATE OF THE FIELD SURVEY, EXCEPT SUCH IMPROVEMENTS OR CASUALTIES, IF ANY, BELOW THE SURFACE AND NOT VISIBLE. ALSO, THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH CONTRACTUAL AGREEMENT DATED 08-21-2000. THE PROPERTY LINES SHOWN HERE ON REPRESENT, UNLESS OTHERWISE NOTED, THE LINES DESCRIBED IN THE RECORD DOCUMENTS REFERENCED HEREON.

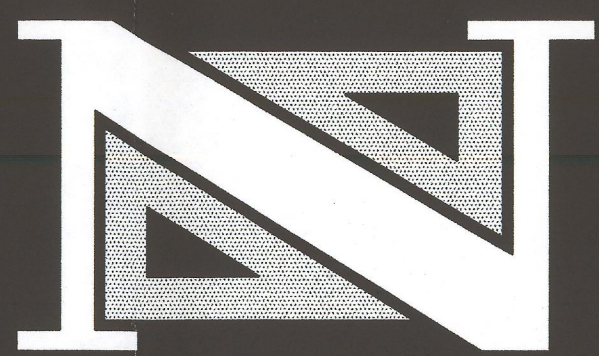
THIS CERTIFICATION/DECLARATION IS GIVEN SOLELY TO THE ABOVE NAMED PARTIES.

CERTIFICATION / DECLARATION CONTINUED:

- THIS SURVEY IS PREPARED SPECIFICALLY FOR THE INDIVIDUAL(S) IN THE TITLE AND/ OR THE CERTIFICATION. THE UNDERSIGNED WILL NOT BE RESPONSIBLE OR ASSUME ANY LIABILITY FOR THE USE OF THIS SURVEY FOR ANY OTHER PURPOSE INCLUDING, BUT NOT LIMITED TO SURVEY AFFIDAVIT, RESALE OF THE PROPERTY OR ASSIGNMENT OF THE SURVEY TO ANY PERSON NOT SO NAMED.
- SUBJECT TO EASEMENTS AND RIGHT-OF-WAY OF RECORD.
- UNDERGROUND UTILITIES IF DEPICTED ARE BASED ON VISIBLE EVIDENCE. THE LACK OF UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OF SAME. REFERENCE TO THE APPROPRIATE UTILITY AUTHORITY SHOULD BE MADE TO VERIFY THE PRESENCE OR ABSENCE OF UTILITIES.
- WETLANDS ARE NOT DEPICTED. THE LACK OF WETLANDS INFORMATION DOES NOT DENY THE EXISTENCE OF SAME. SITE REVIEW AND DELINEATION BY A QUALIFIED PROFESSIONAL IN SAME CAN BE LOCATED IF REQUIRED.
- TOXIC WASTES ARE NOT DEPICTED. THE LACK OF TOXIC WASTE INFORMATION DOES NOT DENY THE EXISTENCE OF SAME. SITE REVIEW FOR THE SAME SHOULD BE PURSUED AND APART FROM THIS SURVEY.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH. IT IS SUBJECT TO FACTS THAT A TITLE SEARCH MAY DISCLOSE.
- CONTAINING: 662,888 SQ. FT.; 15.22 ACRES.
59,819 S.Q. FT.; 1.37 ACRES (PARCEL IN QUESTION)
- ELEVATION BASED ON NGVD 1929 DATUM, AND ESTABLISHED BY RAPID STATIC G.P.S. OBSERVATIONS USING CORS STATION "N.J.I.T.", CONVERSION TO NAVD'83 FROM NAVD'83 BY "VERTCON" PROGRAM. HORIZONTAL COORDINATES BASED ON NAD 83 DATUM.
- MONITORING WELLS: 2614920 AND BBD-C1 ARE PLOTTED IN ACCORDANCE WITH MAP REF. 3, MONITORING WELLS: 2614837-4 AND LBW-2 ARE PLOTTED AS PER MAP REF. 13. ALL OTHERS WELLS DEPICTED HEREON ARE AS LOCATED BY FIELD SURVEY.
- SOIL SAMPLING LOCATIONS (SAMPLE NUMBERS: YA-42, FCA-2, STA-1) AS PER BLASLAND, BOUCK & LEE, INC. (MAP REF. 13)

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| REVISIONS | | | | |
|-----------|----------|--|--------|---------|
| NO. | DATE | DESCRIPTION | DRAWN | CHECKED |
| 1 | 01-05-01 | SOIL SAMPLING AREA ADDED | JB | M.L.S. |
| 2 | 02-18-01 | ADDITIONAL PROPERTY CORNERS SET | JB | M.L.S. |
| 3 | 03-20-01 | SURFACE SAMPLE LOCATIONS AS PER CHILLI ENVIRONMENTAL GROUP, L.L.C. | M.L.S. | M.L.S. |



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BOUNDARY & TOPOGRAPHIC SURVEY
BLOCK 5002 LOT 3, 5, 14, 16
CITY OF NEWARK
ESSEX COUNTY
NEW JERSEY

| | | | | | | | |
|-----------------|--------|-------------|--------|--------------|-------|------------|--------------------|
| DRAWN BY: | J.B. | CHECKED BY: | MWS | PROJECT NO.: | 99771 | SHEET NO.: | 2 OF 2 |
| DESIGNED BY: | M.L.S. | SCALE: | 1"=40' | PAGE: | 6 | DATE: | SEPTEMBER 26, 2000 |
| FIELD BOOK NO.: | 339 | | | | | | |

DEED DESCRIPTION:

DEED DESCRIPTION
OF A TRACT OF LAND SITUATED IN THE CITY OF NEWARK, ESSEX COUNTY, NEW JERSEY

Being known and designated as Lots 3, 5, 14 and 16 in Block 5002 as shown on the Tax Map of the City of Newark, sheet number 123, dated January 01, 2000, more particularly described as follows:

BEGINNING AT A POINT in the southeasterly sideline of U.S. Highway Route 1 and 9 where same is intersected by the dividing line between Lots 12 and 14 in Block 5002 as shown on said Tax Map, thence;

The following eleven courses along said southeasterly sideline:

- North 36 degrees, 10 minutes and 16 seconds West, 75.54 feet to an angle point in same, thence;
- North 50 degrees, 15 minutes and 35 seconds East, 204.82 feet to an angle point in same, thence;
- North 53 degrees, 48 minutes and 33 seconds East, 288.56 feet to an angle point in same, thence;
- South 36 degrees, 11 minutes and 27 seconds East, 10.00 feet to an angle point in same, thence;
- North 53 degrees, 48 minutes and 33 seconds East, 40.00 feet to an angle point in same, thence;
- North 36 degrees, 11 minutes and 27 seconds West, 10.00 feet to an angle point in same, thence;
- North 53 degrees, 48 minutes and 33 seconds East, 332.75 feet to a point of curvature in same, thence;
- Northeasterly, along a curve to the right, having a radius of 1,261.00 feet and an arc length of 240.15 feet to a point of compound curvature in same, thence;
- Northeasterly, along a curve to the right, having a radius of 1,435.00 feet and an arc length of 80.27 feet to a point of tangency in same, thence;
- North 87 degrees, 35 minutes and 29 seconds East, 408.07 feet to an angle point in same, thence;
- South 82 degrees, 50 minutes and 57 seconds East, 53.32 feet to a point in the northwesterly sideline of the New Jersey Turnpike, thence;

The following five courses along said northwesterly sideline:

- South 22 degrees, 42 minutes and 50 seconds West, 171.89 feet to an angle point in same, thence;
- South 08 degrees, 58 minutes and 12 seconds East, 57.92 feet to an angle point in same, thence;
- South 24 degrees, 40 minutes and 32 seconds West, 265.63 feet to an angle point in same, thence;
- South 37 degrees, 47 minutes and 17 seconds West, 150.22 feet to an angle point in same, thence;
- Leaving said northwesterly sideline, along lands now or formerly of the New Jersey Turnpike Authority, South 70 degrees, 28 minutes and 51 seconds West, 105.65 feet to end angle point in same, thence;
- Continuing along said lands now or formerly of the New Jersey Turnpike Authority, South 58 degrees, 17 minutes and 11 seconds West, 290.89 feet to an angle point in same, thence;
- Still along said lands now or formerly of the New Jersey Turnpike Authority, South 57 degrees, 21 minutes and 19 seconds West, 195.27 feet to an angle point in same, thence;
- Still along said lands now or formerly of the New Jersey Turnpike Authority, South 21 degrees, 41 minutes and 48 seconds West, 30.54 feet to a point in the aforementioned northwesterly sideline of the New Jersey Turnpike, thence;
- Along said sideline, North 84 degrees, 14 minutes and 28 seconds West, 28.66 feet to an angle point in same, thence;
- Continuing along said sideline, South 77 degrees, 48 minutes and 23 seconds West, 15.35 feet to a point in same, where it is intersected by the aforementioned dividing line between Lots 12 and 14, thence;
- Along said dividing line, North 82 degrees, 18 minutes and 04 seconds West, 365.77 feet to the POINT AND PLACE OF BEGINNING.

Subject to all easements, restrictions and reservations of record that a complete and accurate title search might disclose.

Containing 662,888 square feet or 15.22 acres of land, more or less. Together with whatever rights, title and/or interest, if any, which may have occurred in a certain parcel of land being occupied by Bayonne Barrel and Drum Co., its successors and/or assigns. Sold parcel of land being situated between the existing northwesterly right of way of the New Jersey Turnpike Authority and the proposed northwesterly right of way of the New Jersey Turnpike Authority as delineated on a certain map entitled "New Jersey Turnpike Authority, New Jersey Turnpike 1969 Widening Section No. 60 - Mile 105 to Mile 107, Property Parcel Map, City of Newark, Essex County" sheet 6342 ALT., prepared by Goodkind & O'Dea, Inc. and Hayden, Harding & Buchanan, Inc., dated August 10, 1988, and being more particularly described as follows:

BEGINNING AT A POINT in the northwesterly sideline of the New Jersey Turnpike Authority, sold point being the terminus of course number 16 of the first tract herein described and run thence;

Along said northwesterly sideline of the New Jersey Turnpike Authority the following four courses:

- South 37 degrees, 47 minutes and 17 seconds West, 133.60 feet to an angle point in same, thence;
- South 54 degrees, 44 minutes and 18 seconds West, 149.84 feet to an angle point in same, thence;
- South 85 degrees, 24 minutes and 53 seconds West, 178.63 feet to an angle point in same, thence;
- North 84 degrees, 14 minutes and 28 seconds West, 184.04 feet to a point in a line of the first tract herein described, thence;

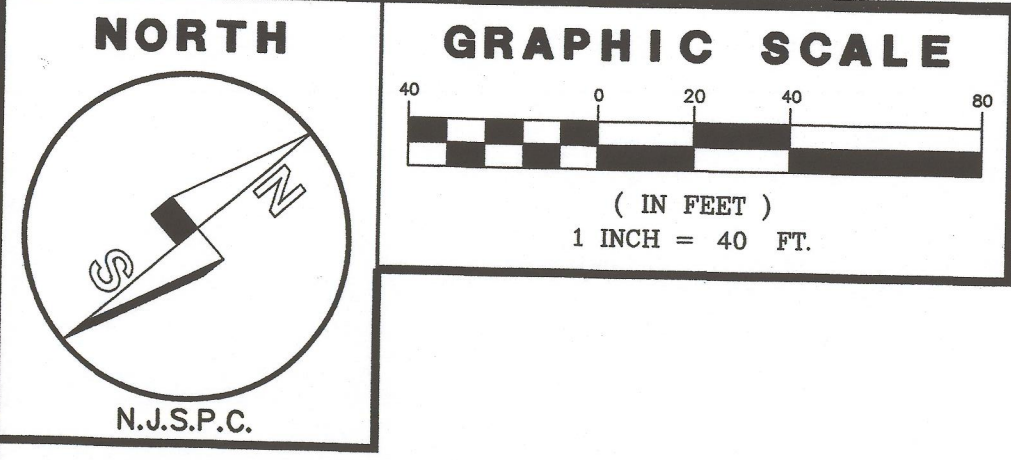
Along the line of the first tract herein described the following four courses:

- North 21 degrees, 41 minutes and 48 seconds East, 30.54 feet to an angle point in same, thence;
- North 57 degrees, 21 minutes and 19 seconds East, 195.27 feet to an angle point in same, thence;
- North 58 degrees, 17 minutes and 11 seconds East, 290.89 feet to an angle point in same, thence;
- North 70 degrees, 28 minutes and 51 seconds East, 105.65 feet to the POINT AND PLACE OF BEGINNING.

Containing 59,819 square feet or 1.37 acres of land, more or less.

Being a part of the premises described in a deed of conveyance between the Trustees of the Episcopal Fund & Diocesan Properties of the Diocese of Newark and Bayonne Barrel and Drum Co. dated February 28, 1946 and recorded in the Essex County Clerk's Office in Deed Book 6107 at Page 135. Also being a part of the premises described in a deed of conveyance between Colville Bros. Inc., E.I. and Bayonne Barrel and Drum Co. dated December 11, 1951 and recorded in the Essex County Clerk's Office in Deed Book 3003 at Page 228. Also being a part of the premises described in a deed of conveyance between Generoso Pacullo & Mary Pacullo and Frank Langella & Daniel Pacullo, dated December 26, 1951 and recorded in the Essex County Clerk's Office in Deed Book 3086 at Page 29. Also being a part of the premises described in a deed of conveyance between The New Jersey Turnpike Authority and Bayonne Barrel and Drum Co., dated December 10, 1952 and recorded in the Essex County Clerk's Office in Deed Book 3098 at Page 192. Also being a part of the premises described in a deed of conveyance between The State of New Jersey and Bayonne Barrel and Drum Co., dated December 20, 1962 and recorded in the Essex County Clerk's Office in Deed Book 3922 at Page 250.

This description prepared in accordance with a certain map entitled "Boundary & Topographic Survey, Block 5002, Tax Map Lots 3, 5, 14 & 16, City of Newark, Essex County, New Jersey" dated September 26, 2000 and prepared by Neglia Engineering Associates, Lyndhurst, New Jersey.

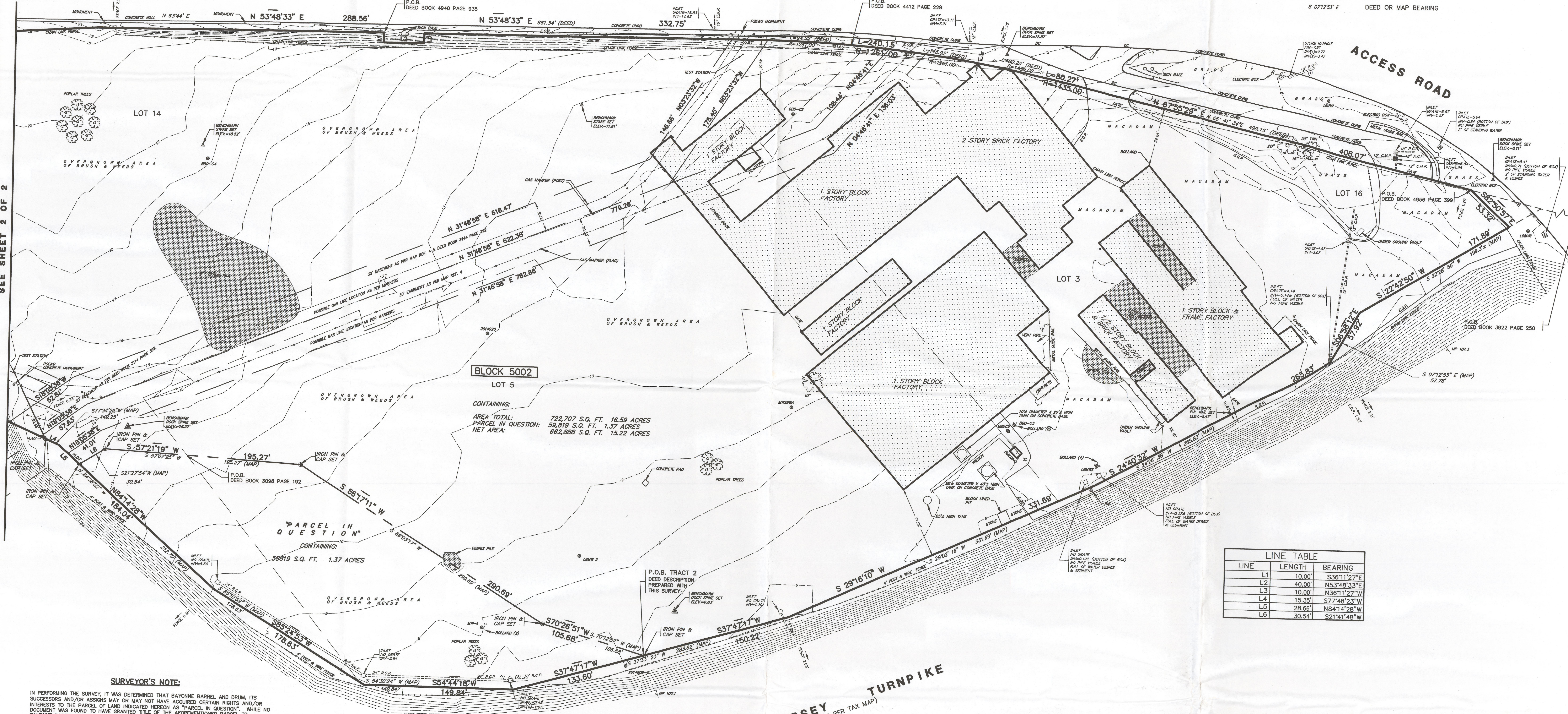


ROUTE U.S. 1 & U.S. 9
(WIDTH VARIES AS PER TAX MAP)

PLAN LEGEND

| | | | |
|----|----------------|--------|-------------------|
| RD | ROOF DRAIN | E.O.P. | EDGE OF PAVEMENT |
| DC | DEPRESSED CURB | ○ | SIGN |
| ○ | UTILITY POLE | △ | SURVEY POINT |
| ⊕ | FIRE HYDRANT | ⊕ | SANITARY MANHOLE |
| ⊕ | WATER VALVE | ⊕ | WATER MANHOLE |
| ⊕ | GAS VALVE | ⊕ | ELECTRIC MANHOLE |
| ⊕ | GAS BOX | ⊕ | TELEPHONE MANHOLE |
| ⊕ | LIGHT POLE | ⊕ | DRAINAGE MANHOLE |
| ⊕ | TREE | ⊕ | GAS MANHOLE |
| ⊕ | SHRUB | ⊕ | D.O.T. MANHOLE |
| ⊕ | GAS MARK OUT | ⊕ | INLET |
| ⊕ | WATER MARK OUT | ⊕ | MONITORING WELL |

S06°58'12"E SURVEY BEARING
S 07°12'53" E DEED OR MAP BEARING



LINE TABLE

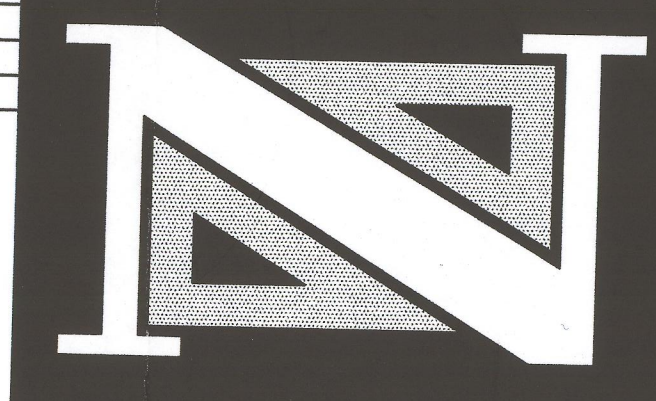
| LINE | LENGTH | BEARING |
|------|--------|-------------|
| L1 | 10.00' | S36°11'27"E |
| L2 | 40.00' | N53°48'33"E |
| L3 | 10.00' | N36°11'27"W |
| L4 | 15.35' | S77°48'23"W |
| L5 | 28.86' | N64°14'28"W |
| L6 | 30.54' | S21°41'48"W |

SURVEYOR'S NOTE:
IN PERFORMING THE SURVEY, IT WAS DETERMINED THAT BAYONNE BARREL AND DRUM, ITS SUCCESSORS AND/OR ASSIGNS MAY OR MAY NOT HAVE ACQUIRED CERTAIN RIGHTS AND/OR INTERESTS TO THE PARCEL OF LAND INDICATED HEREON AS "PARCEL IN QUESTION". WHILE NO DOCUMENT WAS FOUND TO HAVE GRANTED TITLE OF THE AFOREMENTIONED PARCEL TO BAYONNE BARREL AND DRUM OR FRANK LAGELLA, THE FOLLOWING FACTS INDICATE A CERTAIN INTEREST EXISTS:
1. BAYONNE BARREL AND DRUM WAS AT ONE TIME IN ACTUAL POSSESSION OF SAID PARCEL.
2. THE CITY OF NEWARK TAX MAP INDICATES THAT THE PARCEL IN QUESTION IS INCLUDED IN LOT NUMBERS 14 AND 5.
3. THE NEW JERSEY TURNPIKE AUTHORITY MAP, REFERENCED HEREON, STATES THAT THE EXISTING RIGHT OF WAY LINE IN THE VICINITY OF SAID PARCEL, IS TO BE DELETED AND A NEW TO BE VACATED, IT WOULD APPEAR THAT SAID PARCEL CAME INTO POSSESSION OF BAYONNE BARREL AND DRUM.
A COMPLETE AND ACCURATE TITLE SEARCH OF ALL OF THE PROPERTIES IN QUESTION IS REQUIRED TO ANSWER QUESTIONS OF TITLE.

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE RAISED IMPRESSION SEAL OF THE PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT AND MAY HAVE BEEN ALTERED.

REVISIONS

| NO. | DATE | DESCRIPTION | DRAWN | DESIGNED | CHECKED |
|-----|----------|--|--------|----------|---------|
| 1 | 01-05-01 | SOIL SAMPLING AREA ADDED | JB | M.S. | |
| 2 | 02-16-01 | ADDITIONAL PROPERTY CORNERS SET | JB | M.S. | |
| 3 | 03-20-01 | SURFACE SAMPLE LOCATIONS AS PER CHILLI ENVIRONMENTAL GROUP, L.L.C. | M.L.S. | M.L.S. | |



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PROFESSIONAL PLANNER
N.J. LICENSE NO. 5532
CERTIFIED LANDSCAPE ARCHITECT
N.J. LICENSE NO. AS00226

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BOUNDARY & TOPOGRAPHIC SURVEY
BLOCK 5002 LOT 3, 5, 14, 16
CITY OF NEWARK
ESSEX COUNTY
NEW JERSEY

DRAWN BY: J.B. CHECKED BY: M.L.S. SCALE: 1"=40' PROJECT NO.: 99771 SHEET NO.: 1 OF 2
FIELD BOOK NO.: 339 PAGE: 6 DATE: SEPTEMBER 26, 2000